#### COMMONWEALTH OF KENTUCKY

#### BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF BUTLER COUNTY WATER SYSTEM, INC., BUTLER COUNTY, KENTUCKY, FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY AUTHORIZING SAID SYSTEM TO CONSTRUCT MAJOR IMPROVEMENTS AND ADDITIONS TO ITS EXISTING MUNICIPAL WATER DISTRIBUTION SYSTEM PURSUANT TO THE PROVISIONS OF KRS 278.020 OF THE KENTUCKY REVISED STATUTES

CASE NO. 9895

### O R D E R

Butler County Water System, Inc., ("Butler"), by application filed March 26, 1987, is seeking authorization to construct a \$1,461,000 waterworks project, and approval of its financing for the proposed project. The project is to be financed by an Abandoned Mine Lands ("AML") grant from the Natural Resources and Environmental Protection Cabinet.

The proposed construction will provide water service to about 228 new customers. Plans and specifications prepared by Alan H. Vilines, P.E., staff engineer, Butler County Water System, Inc., ("Engineer") have been approved by the Division of Water of the Natural Resources and Environmental Protection Cabinet.

### CONTINUITY OF ADEQUATE AND RELIABLE SERVICE

Water systems can be subject to a wide range of water usage by its customers. Basic engineering references stress the importance of designing and constructing water systems to provide adequate and reliable service to its customers when subject to the peak demands of those customers. The evidence provided by the Engineer indicates that reliable and adequate service can be maintained throughout the expanded system after completion of the proposed construction. However, the Commission is concerned that the Engineer has chosen to design Butler's water distribution to satisfy an instantaneous peak demand which is considerably less than that recommended by the vast majority of standard engineering references. The possibility exists that Butler's customers may experience low pressure conditions and water outages should peak water usage exceed the Engineer's expectations.

The Commission reminds Butler of its obligation to provide adequate and reliable service to all of its customers. Butler should monitor the adequacy of the expanded water distribution system after construction. If this monitoring indicates that the level of service is inadequate or declining, Butler must take necessary actions to maintain the level of service in conformance with the regulations of the Commission.

## FIRE HYDRANT INSTALLATION

Butler has existing conventional fire hydrants, and is proposing to install 7 additional conventional fire hydrants, which are not in compliance with Standard 24 of the National Fire Protection Association as adopted by 815 KAR 10.020 and the "Recommended Standards For Water Works" by the Great Lakes-Upper Mississippi River Board of State Sanitary Engineers as adopted by 401 KAR 6:200.

Butler was requested by the Commission to document that its existing and proposed conventional fire hydrants were capable of providing fire protection. Butler's response did not document the system's capability to offer fire protection; instead the Engineer stated that ". . . these fire hydrants are principally used for filling tanks used by fire fighters, not fighting a fire directly."

The Commission in good conscience cannot approve the installation of conventional fire hydrants that cannot provide fire protection in compliance with both state regulations and accepted engineering criteria. There are other pieces of water system equipment which can be used for the intended operation and maintenance procedures instead of fire hydrants. The installation of conventional fire hydrants may mislead Butler's customers into believing that the water distribution system is capable of providing adequate and reliable volumes of water for fire protection purposes. Under these circumstances the proposed conventional fire hydrants should not be installed.

## PUMP STATION OPERATION

The hydraulic information filed by the Engineer indicates that a pressure reducing valve is located on the suction side of Butler's existing Highway 231 pump station. This non-standard installation was questioned by the Commission in Case No. 9505. At that time, the Engineer stated that this installation was going to be studied and improvement alternatives considered. The information filed by the Engineer in this Case did not mention any improvements made to or proposed for this pump station. Butler

was again questioned about the status of the existing pump station. The Engineer responded that this installation was presently under study and that a solution should be "implemented by the end of this summer." Butler should continue its efforts to improve this inefficient installation. Butler should periodically inform the Commission of the progress being made to improve the Highway 231 pump station.

# FINDINGS AND ORDERS

The Commission, after consideration of the evidence of record, and being advised, is of the opinion and finds that:

- 1. With appropriate system-wide monitoring of service and the deletion of the proposed conventional fire hydrants, public convenience and necessity require that the construction proposed in the application be performed and that a certificate of public convenience and necessity be granted.
- 2. The proposed construction consists of approximately 36.5 miles of 8-, 6-, 4-, and 3-inch diameter pipelines, a 100,000-gallon water storage tank, a booster pumping station, 228 service connections, and related appurtenances. The low bids totaled \$1,020,550 which will require about \$1,461,000 after allowances are made for fees, contingencies, and other indirect costs.
- 3. Butler should monitor the adequacy of the expanded water distribution system after construction. If the level of service is inadequate or declining, Buter should take immediate action to maintain the level of service in conformance with the regulations of the Commission.

- 4. Butler should obtain approval from the Commission prior to performing any additional construction not expressly certificated by this Order.
- 5. Any deviations from the construction herein approved which could adversely affect service to any customer should be done only with the prior approval of the Commission.
- 6. Butler should file a written report to the Commission at the end of each calendar quarter outlining the progress being made to improve the existing Highway 231 pump station.
- 7. Butler should furnish duly verified documentation of the total costs of this project including the cost of construction and all other capitalized costs (engineering, legal, administrative, etc.) within 60 days of the date that construction is substantially completed. Said construction costs should be classified into appropriate plant accounts in accordance with the Uniform System of Accounts for Water Utilities prescribed by this Commission.
- 8. Butler's contract with its Engineer should require full-time resident inspection under the general supervision of a professional engineer with a Kentucky registration in civil or mechanical engineering to insure that the construction work is done in accordance with the contract plans and specifications and in conformance with the best practices of the construction trades involved in the project.
- 9. Butler should require the Engineer to furnish a copy of the "as-built" drawings and a signed statement that the construction has been satisfactorily completed in accordance with the

contract plans and specifications within 60 days of the date of substantial completion of this construction.

- 10. A 5/8-inch x 3/4-inch meter should be the standard customer service meter for all new customers and should be installed at all points of service unless the customer provides sufficient justification for the installation of a larger meter.
- 11. The financing plan proposed by Butler is for lawful objects within the corporate purposes of its utility operations, is necessary and appropriate for and consistent with the proper performance of services to the public and will not impair its ability to perform these services and should, therefore, be approved.
- 12. The financing secured by Butler for this project will be needed to pay for the work herein approved. Butler's financing plan should, therefore, be approved.

#### IT IS THEREFORE ORDERED that:

- 1. Butler be and it hereby is granted a certificate of public convenience and necessity to proceed with the proposed construction project as set forth in the drawings and specifications of record herein on the condition that service levels be monitored, corrective action taken in accordance with Finding Number 1 and Finding Number 3 of this Order, and that the proposed conventional fire hydrants be deleted.
- 2. Butler's financing plan consisting of an AML grant of \$1,461,000 be and it hereby is approved.

3. Butler shall comply with all matters set out in Findings 3 through 10 as if the same were individually so ordered.

Nothing contained herein shall be deemed a warranty of the Commonwealth of Kentucky, or any agency thereof, of the financing herein authorized.

Done at Frankfort, Kentucky, this 25th day of June, 1987.

PUBLIC SERVICE COMMISSION

Chairman

Vice Chairman

Vice Chairman

John Mulliano, formissioner

ATTEST:

Executive Director